

**IN THE CLAIMS**

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (Previously Presented): An optical writing unit, comprising:

a light emitting device array comprising a plurality of light emitting device array chips, each of the light emitting device array chips comprising a plurality of light emitting devices that are arranged at a predetermined interval P; and

an image forming device array comprising a plurality of image forming devices, wherein light volume of the light emitting devices is set such that a calculated gradient of an approximated linear regression for exposure areas corresponding to a plurality of the light emitting devices that are selected at a predefined cycle falls within a predetermined range, the predetermined range being defined for an effective image area in its entirety, and

the light volume of the light emitting devices that are located closest and next closest to an edge of the light emitting device array chips are set up such that said gradient corresponds to an interval  $P_a$  between the light emitting device closest to the edge of one of the light emitting device array chips and the light emitting device closest to the edge of an adjacent one of the light emitting device array chips.

Claim 12 (Original): The optical writing unit as claimed in claim 11, wherein the predefined cycle is a constant throughout the light emitting device array.

Claim 13 (Original): The optical writing unit as claimed in claim 12, wherein one cycle of the predefined constant cycle comprises  $M+N$  of the light emitting devices, where  $M$  represents the number of the light emitting devices that are selected,  $N$  represents the number of the light emitting devices that are not selected, and

$M$  is equal to or less than  $N$ .

Claim 14 (Previously Presented): The optical writing unit as claimed in claim 11, wherein the predetermined interval  $P$  of the light emitting devices is set equal to  $1/10$  or less than  $1/10$  of an interval of the image forming devices.

Claim 15 (Previously Presented): The optical writing unit as claimed in claim 11, wherein the approximated linear regression of the exposure areas corresponding to the plurality of light emitting devices is obtained from a plurality of the light emitting devices that are located within a range between  $LK$  and  $3LK$ , where  $LK$  represents an interval of the image forming devices.

Claim 16 (Previously Presented): The optical writing unit as claimed in claim 11, wherein intervals between the light emitting device closest to the edge of one of the light emitting device array chips and the light emitting device closest to the edge of an adjacent one of the light emitting device array chips are categorized into a plurality of ranks based on the magnitude of the intervals, and the light volume of each of the light emitting devices is set up according to said ranks.

Claim 17 (Previously Presented): The optical writing unit as claimed in claim 16, wherein the ranks are  $P_a < P_L$ ,  $P_L \leq P_a \leq P_H$ , and  $P_H < P_a$ , where  $P_a$  represents the interval

between the light emitting device closest to the edge of one of the light emitting device array chips and the light emitting device closest to the edge of an adjacent one of the light emitting device array chips, and PL and PH represent predetermined intervals establishing different threshold levels, where  $PL < PH$ .

Claim 18 (Original): The optical writing unit as claimed in claim 17, wherein the light volume is increased where  $P_a > PH$ , and the light volume is decreased where  $P_a < PL$ .

Claim 19 (Previously Presented): The optical writing unit as claimed in claim 17, wherein PL is set at  $0.9P$ , and PH is set at  $1.1P$ .

Claim 20 (Previously Presented): The optical writing unit as claimed in claim 11, wherein the light emitting devices that are located closest and next closest to an edge of the light emitting device array chip are the light emitting devices that correspond to a range of distances between  $0.5LK$  and  $1.5LK$ , where LK represents the interval of the image forming devices.

Claim 21 (Previously Presented): An image forming apparatus for forming an image, comprising:

an exposure unit comprising an image forming device array and a light emitting device array, the light emitting device array comprising a plurality of light emitting device array chips, each of the light emitting device array chips comprising a plurality of light emitting devices arranged at a predetermined interval,

wherein the light volume of each of the light emitting devices is set up such that a calculated gradient of an approximated linear regression of exposure areas corresponding to a

plurality of the light emitting devices that are selected based on a predetermined cycle falls within a predetermined range for an effective image domain in its entirety, and

the light volume of each of the light emitting devices closest and next closest to the edge of the light emitting device array chip is set up such that said gradient corresponds to an interval between the light emitting device closest to the edge of one of the light emitting device array chips and the light emitting device closest to the edge of an adjacent one of the light emitting device array chips.

Claim 22 (Previously Presented): A driving method for driving an optical writing unit comprising an exposure unit, the exposure unit comprising a light emitting device array, the light emitting device array comprising a plurality of light emitting device array chips, each of the light emitting device array chips comprising a plurality of light emitting devices arranged at a predetermined interval, the image forming device array comprising a plurality of image forming devices, the driving method comprising:

setting the light volume of each of the light emitting devices such that a calculated gradient of an approximated linear regression of exposure areas corresponding to a plurality of the light emitting devices that are selected based on a predetermined cycle falls within a predetermined range for an effective image domain in its entirety, and

wherein the light volume of each of the light emitting devices closest and next closest to the edge of the light emitting device array chip is set up such that said gradient corresponds to an interval between the light emitting device closest to the edge of one of the light emitting device array chips and the light emitting device closest to the edge of an adjacent one of the light emitting device array chips.